

Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the Examiner mailed April 7, 2004. New claims 21-23 have been added. Support for the new claims is found in the specification as originally filed, for example, in original claims 1 and 12. Claims 1-23 are pending. Reconsideration and reexamination are respectfully requested.

Rejection under 35 U.S.C. § 102(b)

Claims 1-3, 5-9, and 12-18 are rejected as being anticipated by Pittman (US 6,123,147). Applicants traverse the rejection. The method and system of Pittman involve using hot water from a water heater to heat air cooled by the refrigeration coil when the desired result is to reduce humidity without significantly reducing the air temperature. Pittman specifically teaches "[t]he humidity control system uses hot water from the residential hot water heater to reheat air exiting from the refrigeration coils." See column 1, lines 42-44.

In contrast, independent claims 1, 5, 9, 12, and 16, each recite an HVAC system having a heating unit and a cooling unit. The claimed methods and systems involve controlling and operating the heating and cooling units of the HVAC system. Pittman does not disclose methods or systems involving both the heating and cooling units of an HVAC system. Pittman clearly recites operating a cooling system and hot water heater to achieve the desired humidity control. A hot water heater, however, is not part of an HVAC system. Thus, Pittman clearly fails to teach each and every limitation of the claims. Further, Pittman fails to provide some of the advantages of the present invention. For example, one advantage of the present invention is that the control may be relatively simple, little or no additional hardware may be required to retrofit or modify existing HVAC systems, and the system may provide a cost effective way to help control both sensible and latent cooling of an inside space. (see, for example, specification, page 2, line 20 through page 3, line 2). For the foregoing reasons, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 19 and 20 are rejected as being unpatentable over Pittman as applied to claim 1 and further in view of Official Notice that computers to control HVAC systems were conventional at the time the invention was made. Applicants traverse the rejection.

As stated above, Pittman teaches operating a cooling system and hot water heater to achieve a desired humidity control. Pittman fails to teach methods or systems involving controlling both the heating and cooling units of an HVAC system, as is recited in the instant claims. Thus, regardless of whether or not it was conventional at the time of Pittman's disclosure to use computers to control HVAC systems, the combination of Pittman and the Official Notice by the Examiner would result in the computer control of a cooling system and hot water heater, not a computer-readable medium with a program for controlling both a heating unit and a cooling unit of an HVAC system, as is presently claimed. Withdrawal of the rejection is respectfully requested.

Claims 4, 10, and 11 are rejected as being unpatentable over Pittman as applied to claim 1, and further in view of Alford. For the same reasons discussed above, as well as other reasons, dependent claims 4, 10 and 11 are also believed to be in condition for allowance.

New claims 21 and 22 recite many of the elements of claim 1, including the limitation that the heating and cooling units of the HVAC system are sized to heat or cool an inside space under an expected heating or cooling load, respectively. Thus, for the same reasons discussed above with respect to claim 1, as well as other reasons, new claims 21 and 22 are believed to be in condition for allowance. New claim 23 is similar to claim 5, with some limitations removed. New claim 23 is also believed to be patentable over the cited prior art.

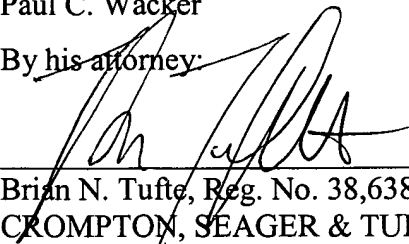
Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims 1-23 are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully Submitted,

Paul C. Wacker

By his attorney:

Date: July 7, 2004



Brian N. Tufte, Reg. No. 38,638
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Telephone: (612) 677-9050
Facsimile: (612) 359-9349